

# Chat Window

Chat Window The `<ava-chat-window>` component is a comprehensive chat interface that provides message display, real-time input, custom icons, and automatic scrolling. It features a flexible message system, keyboard shortcuts, and responsive design for building interactive chat applications, customer support systems, and messaging interfaces.

How to use ■ import { AavaChatWindowComponent , ChatMessage , ChatWindowIcon , } from "@aava/play-core" ;

Basic Usage ■ A chat window with message history, input area, and custom icons for sending messages and attachments. Angular Preview Code

```
< aava-chat-window [messages] = "messages() " [placeholder] = " placeholder " [disabled] = " disabled " [rows] = " rows " [icons] = " chatIcons " (messageSent) = " onMessageSent($event) " (iconClicked) = " onIconClick($event) " >
</ aava-chat-window > @ViewChild ( AavaChatWindowComponent ) chatWindow ! : AavaChatWindowComponent ; messages = signal < ChatMessage [ ] > ( [ ] ) ; placeholder = "Type your message here..." ; disabled = false ; rows = 3 ; chatIcons : ChatWindowIcon [ ] = [ { name : 'paperclip' , slot : 'icon-start' , size : 16 , color : '#2563eb' , click : ( ) => this . onFileAttach ( ) } , { name : 'wand-sparkles' , slot : 'icon-end' , size : 16 , color : '#2563eb' , click : ( ) => this . onMagicAction ( ) } , { name : 'send' , slot : 'icon-end' , size : 16 , color : '#2563eb' , click : ( ) => this . onSendClick ( ) } ] ; onMessageSent ( messageText : string ) { // Add user message const userMessage : ChatMessage = { id : Date . now ( ) . toString ( ) , text : messageText , timestamp : new Date ( ) . toLocaleString ( 'en-US' , { hour : 'numeric' , minute : '2-digit' , hour12 : true } ) + ' | Today' , isUser : true } ; this . messages . update ( messages => [ ... messages , userMessage ] ) ; // Add bot response after delay setTimeout ( ( ) => { const botMessage : ChatMessage = { id : ( Date . now ( ) + 1 ) . toString ( ) , text : this . generateBotResponse ( messageText ) , timestamp : new Date ( ) . toLocaleString ( 'en-US' , { hour : 'numeric' , minute : '2-digit' , hour12 : true } ) + ' | Today' , isUser : false , avatar : '■' } ; this . messages . update ( messages => [ ... messages , botMessage ] ) ; } , 1000 ) ; } onIconClick ( event : { icon : ChatWindowIcon , currentMessage : string } ) { console . log ( 'Icon clicked:' , event . icon . name , 'Current message:' , event . currentMessage ) ; if ( event . icon . name === 'send' ) { // User can add custom logic here before sending console . log ( 'Send icon clicked, message:' , event . currentMessage ) ; // The send will be handled by the icon's click handler or manually trigger } }
```

Features ■ Message Display ■ Message History : Scrollable message container with user and bot messages

Message Styling : Different styling for user and bot messages

Timestamps : Automatic timestamp display for each message

Auto-scroll : Automatic scrolling to the latest message

Custom Avatars : Support for user avatars in messages

Input System ■ Real-time Input : Live text input with placeholder support

Keyboard Shortcuts : Enter to send, Shift+Enter for new line

Custom Icons : Configurable icons for different actions

Icon Slots : Start and end icon slots for flexible positioning

Disabled State : Support for disabled input state

User Experience ■ Responsive Design : Adapts to different screen sizes

Smooth Scrolling : Smooth auto-scroll behavior

Custom Scrollbars : Styled scrollbars

for better UX Focus Management : Proper focus handling for accessibility Loading States : Support for loading and processing states Configuration ■ Flexible Messages : Support for different message types and content Icon Configuration : Customizable icons with click handlers Input Configuration : Configurable placeholder, rows, and styling Event Handling : Comprehensive event system for all interactions API Reference ■ Inputs ■ Property Type Default Description messages ChatMessage[] [] Array of chat messages to display placeholder string 'Type a message' Placeholder text for the input field disabled boolean false Whether the chat window is disabled icons ChatWindowIcon[] [] Array of icons to display in the input area rows number 3 Number of rows for the textarea input Outputs ■ Property Type Description messageSent EventEmitter<string> Emitted when a message is sent iconClicked EventEmitter<{icon: ChatWindowIcon, currentMessage: string}> Emitted when an icon is clicked Methods ■ Method Description triggerSend() Public method to trigger message sending getCurrentMessage() Public method to get the current message text Interfaces ■ ChatMessage ■ interface ChatMessage { id: string ; // Unique message identifier text: string ; // Message content timestamp: string ; // Message timestamp isUser: boolean ; // Whether message is from user or bot avatar?: string ; // Optional avatar URL } ChatWindowIcon ■ interface ChatWindowIcon { name: string ; // Icon name click?: () => void ; // Optional click handler size?: number ; // Icon size (default: 16) color?: string ; // Icon color (default: '#2563eb') slot: "icon-start" | "icon-end" ; // Icon position } CSS Classes ■ The component provides several CSS classes for styling: Class Name Description .chat-window Main chat window container .chat-main Main chat content wrapper .messages-container Scrollable messages area .message-wrapper Individual message wrapper .user-message User message styling .bot-message Bot message styling .message-content Message content container .message-card Message card styling .message-text Message text styling .message-timestamp Message timestamp styling .input-area Input area container CSS Custom Properties ■ The component uses CSS custom properties for theming: Property Description --surface-secondary Secondary surface color for scrollbar --border-color Border color for input and scrollbar --surface-background Background color for input area --text-tertiary Tertiary text color for scrollbar --text-secondary Secondary text color for scrollbar --border-radius-full Full border radius for input Best Practices ■ Message Management ■ Unique IDs : Ensure each message has a unique identifier Timestamp Format : Use consistent timestamp formatting Message Length : Consider message length limits for better UX Loading States : Show typing indicators for better user experience User Experience ■ Auto-scroll : Always scroll to bottom for new messages Keyboard Support : Provide keyboard shortcuts for common actions Visual Feedback : Clear visual distinction between user and bot messages Responsive Design : Ensure chat works well on mobile devices Performance ■ Message Limits : Consider limiting displayed messages for performance Efficient Rendering : Use trackBy functions for large message lists Memory Management : Clean up old messages to prevent memory leaks Debounced Input : Consider debouncing input for better performance Accessibility ■ Screen Reader Support : Ensure messages are properly announced Keyboard Navigation : Full keyboard support for all interactions Focus Management : Proper focus handling for input and icons ARIA Labels : Provide

appropriate ARIA labels for interactive elements Accessibility Guidelines ■ Semantic Structure ■ The component provides proper semantic structure: Message Roles : Proper roles for user and bot messages Input Labels : Clear labels for input fields Icon Descriptions : Proper descriptions for interactive icons Focus Management : Logical focus order through chat elements Screen Reader Support ■ Message Announcements : Clear announcements of new messages Input Feedback : Proper feedback for input actions Icon Descriptions : Descriptive labels for all icons Status Updates : Clear status updates for loading and sending Keyboard Navigation ■ Tab Order : Logical tab order through chat elements Enter Key : Enter key for sending messages Icon Activation : Keyboard activation for all icons Focus Indicators : Clear focus indicators for keyboard users Color and Contrast ■ WCAG Compliance : All text and interactive elements meet WCAG AA contrast ratios High Contrast Mode : Component works with system high contrast settings Color Independence : Information is not conveyed by color alone Visual Hierarchy : Clear visual distinction between message types Responsive Behavior ■ Mobile Adaptations ■ The chat window automatically adapts to mobile screens: Touch Optimization : Optimized touch targets for mobile interaction Keyboard Handling : Proper mobile keyboard behavior Viewport Adaptation : Adapts to different mobile viewport sizes Scroll Behavior : Smooth scrolling on mobile devices Breakpoint Behavior ■ Desktop (>768px) : Full chat interface with all features Mobile ( $\leq$ 768px) : Compact layout with optimized spacing Input Sizing : Responsive input area sizing Icon Sizing : Appropriate icon sizes for different screens Content Considerations ■ Message Length : Messages adapt to different screen widths Input Height : Input area adjusts based on content Scroll Performance : Optimized scrolling for mobile devices Touch Targets : Adequate touch target sizes for mobile

```

<aava-chat-window
  [messages]="messages()"
  [placeholder]="placeholder"
  [disabled]="disabled"
  [rows]="rows"
  [icons]="chatIcons"
  (messageSent)="onMessageSent($event)"
  (iconClicked)="onIconClick($event)"
>
</aava-chat-window>

---

@ViewChild(AavaChatWindowComponent) chatWindow!: AavaChatWindowComponent;

messages = signal<ChatMessage[]>([ ]);
placeholder = "Type your message here...";
disabled = false;
rows = 3;

chatIcons: ChatWindowIcon[] = [
  {
    name: 'paperclip',
    slot: 'icon-start',
    size: 16,
    color: '#2563eb',
    click: () => this.onFileAttach()
  },
  {
    name: 'wand-sparkles',
    slot: 'icon-end',
    size: 16,
    color: '#2563eb',
    click: () => this.onMagicAction()
  },
  {
    name: 'send',
    slot: 'icon-end',
    size: 16,
    color: '#2563eb',
    click: () => this.onSendClick()
  }
];

onMessageSent(messageText: string) {
  // Add user message
  const userMessage: ChatMessage = {
    id: Date.now().toString(),
    text: messageText,
    timestamp: new Date().toLocaleString('en-US', {
      hour: 'numeric',
      minute: '2-digit',
      hour12: true
    }) + ' | Today',
    isUser: true
  }
}

```

```
};

this.messages.update(messages => [...messages, userMessage]);

// Add bot response after delay
setTimeout(() => {
  const botMessage: ChatMessage = {
    id: (Date.now() + 1).toString(),
    text: this.generateBotResponse(messageText),
    timestamp: new Date().toLocaleString('en-US', {
      hour: 'numeric',
      minute: '2-digit',
      hour12: true
    }) + ' | Today',
    isUser: false,
    avatar: '■'
  };

  this.messages.update(messages => [...messages, botMessage]);
}, 1000);
}

onIconClick(event: { icon: ChatWindowIcon, currentMessage: string }) {
  console.log('Icon clicked:', event.icon.name, 'Current message:', event.currentMessage);

  if (event.icon.name === 'send') {
    // User can add custom logic here before sending
    console.log('Send icon clicked, message:', event.currentMessage);
    // The send will be handled by the icon's click handler or manually trigger
  }
}
```